

Superfund Records Center
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PRODUCT NAME: JET 91

MSDS No.: 13046

REVISION: 2

PREPARED BY: TSCA COORDINATOR

ISSUE DATE: 07/01/90 REVISION DATE: 03/09/92

SECTION A. MATERIAL IDENTIFICATION.

MANUFACTURER: McGEAN-ROHCO, INC.

CHEMTREC:

TELEPHONE #: 800-424-9300

38521 SCHOOLCRAFT AVE.
LIVONIA MI 48150
TELEPHONE: 313-872-1600

SECTION B. INGREDIENTS AND HAZARDS.

INGREDIENT: BORAX DECAHYDRATE

CAS NUMBER: 1303-96-4 25.0 - 35.0%
EXPOSURE LIMIT: TWA: 10mg/CUBIC METER
SUSPECT CARCINOGEN: NO

SECTION C. PHYSICAL DATA.

APPEARANCE: MOIST, WHITE, POWDER
ODOR: BLAND

BOILING POINT: NA
FREEZING POINT: NA

SPECIFIC GRAVITY: NA
PH: NA

VAPOR PRESSURE: NA
VAPOR DENSITY: NA
% VOLATILE BY VOLUME: NA
SOLUBILITY IN WATER: 10%

EVAPORATION RATE: NA

SECTION D. FIRE AND EXPLOSION HAZARD DATA.

FLASH POINT: NONE
TEST METHOD: NA

LIMITS: LEL: NA
UEL: NA

HAZARD SYMBOL CODES

	NFPA	HMIS
HEALTH:	0	0
FLAMMABILITY:	0	0
REACTIVITY:	0	0
SPECIAL:		

EXTINGUISHING MEDIA: NOT FLAMMABLE

SPECIAL FIRE FIGHTING NONE
PROCEDURES:

UNUSUAL FIRE OR NONE
EXPLOSION HAZARDS:

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SECTION E. REACTIVITY DATA.

MATERIAL IS STABLE.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

CONDITIONS TO AVOID: NA

CHEMICAL INCOMPATIBILITIES: STRONG ACIDS

HAZARDOUS DECOMPOSITION IF INVOLVED IN A FIRE, OXIDES OF CARBON COULD BE RELEASED.

SECTION F. HEALTH HAZARD DATA.

SUMMARY OF RISKS: SARA--CHRONIC

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY CONTACT: NONE KNOWN.

TARGET ORGANS: EYES, RESPIRATORY TRACT.

PRIMARY ENTRY ROUTES: THROUGH CONTACT AND INHALATION OF DUST.

ACUTE EFFECTS: NONE KNOWN

CHRONIC EFFECTS: BORAX IS CONSIDERED A MAMMALIAN REPRODUCTIVE TOXIN.

SIGNS & SYMPTOMS OF OVEREXPOSURE:

EYE CONTACT: IRRITATION DUE TO PARTICULATE.

SKIN CONTACT: POSSIBLE SKIN IRRITATION OF SENSITIVE INDIVIDUALS.

INHALATION: IRRITATION OF RESPIRATORY TRACT.

INGESTION: NAUSEA.

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EMERGENCY & FIRST AID PROCEDURES:

EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. IF ANY IRRITATION PERSISTS, GET MEDICAL ATTENTION.

SKIN CONTACT: FLUSH THOROUGHLY WITH WATER.

INHALATION: REMOVE TO FRESH AIR.

INGESTION: IF CONSCIOUS, GIVE SEVERAL GLASSES OF WATER AND INDUCE VOMITING GET MEDICAL ATTENTION.

SECTION G. SPILL, LEAK AND DISPOSAL PROCEDURES.

SPILL/LEAK PROCEDURES: SWEEP OR VACUUM UP. FLUSH AREA WITH WATER.

WASTE MANAGEMENT & DISPOSAL PROCEDURES: SEND TO LANDFILL OR DISSOLVE IN WATER, NEUTRALIZE TO WITHIN POTW PH LIMITS AND SEWER. FOLLOW ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

RCRA # (IF DISPOSED AS RECEIVED): NONE

SECTION H. SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT:

GOGGLES: SAFETY GLASSES.

GLOVES: RUBBER.

RESPIRATOR: IF TWA IS EXCEEDED, MUST BE NIOSH OR MSHA APPROVED.

OTHER: SUFFICIENT TO PREVENT SKIN CONTACT.

WORKPLACE CONSIDERATIONS:

VENTILATION: SUFFICIENT TO KEEP BELOW TWA LIMIT.

SAFETY STATIONS: EYE WASH.

OTHER: NA

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SECTION I. SPECIAL PRECAUTIONS.

SPECIAL HANDLING & STORAGE PROCEDURES: STORE IN A COOL, DRY AREA TO PREVENT CAKING.

D.O.T. CLASS:

NONE

UN REGISTER: NONE

IMCO CLASS:

NONE

UN REGISTER: NONE

EXPLANATION OF SYMBOLS

NA = NOT APPLICABLE

UK = UNKNOWN

THIS MATERIAL SAFETY DATA SHEET IS OFFERED SOLELY FOR YOUR INFORMATION, CONSIDERATION, AND INVESTIGATION. WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, McGEAN-ROHCO, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

MATERIAL SAFETY DATA SHEET

PENNZOIL COMPANY

15

I. PRODUCT IDENTIFICATION

Manufacturer's Name	PENNZOIL CO., GUMOUT DIVISION	CAS Number: MIXTURE
Address	410 GATEWAY CENTER PITTSBURGH, PENNSYLVANIA 152221469	MSDS Code: 000951
Emergency Telephone No.	(713) 236-6070	HFPA Hazard Identification Degree of Hazard Hazard Ratings Health: 1 0 - Least 1 - Slight Fire: 3 2 - Moderate Reactivity: 0 3 - High 4 - Extreme
Trade Name	JESSE'S SHOE CLEANER	
Synonyms	JESSE'S SHOE CLEANER	

II. INGREDIENTS

COMPONENT NAME CAS NUMBER	HAZARDOUS IN BLEND	PERCENTAGE MIN MAX	COMPONENT EXPOSURE LIMITS	UNITS
PETROLEUM SOLVENT PROPRIETARY	YES	65.00 TO 80.00	OSHA PEL ACGIH TLV	NO LIMIT NO LIMIT
ALCOHOL PROPRIETARY	YES	5.00 TO 15.00	OSHA PEL ACGIH TLV	NO LIMIT NO LIMIT
SURFACTANTS PROPRIETARY	NO	1.00 TO 5.00	OSHA PEL ACGIH TLV	NO LIMIT NO LIMIT
HYDROCARBON PROPELLANT MIXTURE	YES	5.00 TO 25.00	ACGIH TLV	1800.0000 MG/M3

BY: ENVIRONMENTAL, SAFETY & HEALTH
(713) 546-8512

EFFECTIVE DATE: NOVEMBER 15, 1985

DISCLAIMER OF WARRANTY:

THE INFORMATION CONTAINED HEREIN IS BASED UPON DATA AVAILABLE TO US, AND REFLECTS OUR BEST PROFESSIONAL JUDGEMENT. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF SUCH DATA. THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, OR THAT ANY SUCH USE DOES NOT INFRINGE ANY PATENT, SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS OF USE BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, WE DO NOT ASSUME ANY RESPONSIBILITY FOR THE RESULTS OF SUCH APPLICATION. THIS INFORMATION IS FURNISHED UPON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS OWN DETERMINATION OF THE SUITABILITY OF THE MATERIAL FOR HIS PARTICULAR PURPOSE.

REQUIRED UNDER USDL SAFETY AND HEALTH REGULATIONS FOR SHIP REPAIRING, SHIPBUILDING, AND SHIPBREAKING (29 CFR 1915, 1916, 1917).

TRW-01401

0908-2774

III HEALTH EFFECT INFORMATION**CONTACT**

AVOID EYE CONTACT. THIS PRODUCT MAY BE MILDLY TO MODERATELY IRRITATING TO THE EYE UPON

SKIN CONTACT

AVOID SKIN CONTACT. THIS PRODUCT MAY CAUSE SKIN IRRITATION UPON DIRECT CONTACT. PROLONGED OR REPEATED CONTACT MAY RESULT IN CONTACT DERMATITIS WHICH IS CHARACTERIZED BY DRYNESS, CHAPPING, AND REDDENING. THIS CONDITION MAY MAKE THE SKIN MORE SUSCEPTIBLE TO OTHER IRRITANTS, SENSITIZERS, AND DISEASE. PRE-EXISTING SKIN CONDITIONS MAY MAKE THE SKIN MORE SUSCEPTIBLE AND FACILITATE UPTAKE BY THIS ROUTE.

INHALATION

AVOID PROLONGED INHALATION OF VAPORS. EXPOSURE TO VAPORS MAY BE IRRITATING TO THE THROAT AND LUNGS. WHEN HIGH CONCENTRATIONS ARE INHALED, HUMAN SIGNS MAY INCLUDE A REDDENING OF THE FACE AND A FEELING OF INCREASED BODY HEAT. IN ADDITION, DISTURBED VISION, DIZZINESS, TREMORS, SALIVATION, CARDIAC STRESS, DROWSINESS, DULLNESS, NUMBNESS, WEAKNESS, HEADACHE, NAUSEA, AND CONFUSION. AS WELL AS RESPIRATORY DIFFICULTIES MAY BE APPARENT. SIGNS AND SYMPTOMS FROM CHRONIC EXPOSURE RESEMBLE THOSE FROM ACUTE MISHAPS BUT ARE IN PART SYSTEMICALLY MORE SEVERE. LONG-TERM EXPOSURE TO VAPOR CONCENTRATIONS HAVE BEEN REPORTED TO PRODUCE NON-SPECIFIC SYMPTOMS SUCH AS NERVOUSNESS, LOSS OF APPETITE, NAUSEA, AND DIARRHEA. OTHER SYMPTOMS RELATED TO THE NERVOUS SYSTEM, GASTROINTESTINAL TRACT, LUNGS, EYES, AND REPRODUCTIVE SYSTEM HAVE BEEN CITED.

INGESTION

DO NOT INGEST. INGESTION MAY RESULT IN LUNG ASPIRATION. INGESTION WILL CAUSE SEVERE GASTROINTESTINAL DISTRESS. SEVERE ORAL INTOXICATION WILL LEAD TO INTENSE BURNING OF THE THROAT AND MAY RESULT IN DROWSINESS, DULLNESS, NUMBNESS, AND HEADACHE FOLLOWED BY DIZZINESS, WEAKNESS, AND NAUSEA. LOSS OF CONSCIOUSNESS AND CONVULSIONS FOLLOWED BY DEATH MAY RESULT. SEE HEALTH DATA SECTION BELOW.

HEALTH DATA

ASPIRATION MAY LEAD TO CHEMICAL PNEUMONITIS WHICH IS CHARACTERIZED BY PULMONARY EDEMA AND HEMORRHAGE, AND MAY BE FATAL. SIGNS OF LUNG INVOLVEMENT INCLUDE INCREASED RESPIRATION RATE, INCREASED HEART RATE, AND A BLuish DISCOLORATION OF THE SKIN. COUGHING, CHOKING, AND GAGGING ARE OFTEN NOTED AT THE TIME OF ASPIRATION. GASTROINTESTINAL DISCOMFORT MAY DEVELOP, FOLLOWED BY VOMITTING, WITH A FURTHER RISK OF ASPIRATION.

IV. EMERGENCY FIRST AID PROCEDURES

EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER AND CONTINUE FLUSHING FOR 15 MINUTES UNTIL IRRITATION SUBSIDES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

SKIN CONTACT: WASH CONTAMINATED AREA THOROUGHLY WITH SOAP AND WATER. USE A HAND OR SKIN LOTION TO PREVENT DRYNESS. IF REDNESS OR IRRITATION OCCURS, SEEK MEDICAL ATTENTION.

INHALATION: IF EXPOSURE LEVELS EXCEED THE LIMITS LISTED IN SECTION II OR III, REMOVE VICTIM FROM EXPOSURE. IF DISCOMFORT PERSISTS SEEK MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION.

TRW-01403

0908-2776

V PERSONAL HEALTH PROTECTION INFORMATION**PROTECTION**

EYE PROTECTION IS NOT REQUIRED UNDER CONDITIONS OF NORMAL USE. IF MATERIAL IS HANDLED SUCH THAT IT COULD BE SPLASHED INTO EYES, WEAR PLASTIC FACE SHIELD OR SPLASH-PROOF SAFETY GOGGLES.

SKIN PROTECTION

USE IMPERVIOUS SYNTHETIC RUBBER CLOTHING (BOOTS, GLOVES, APRONS, ETC.) OVER PARTS OF THE BODY SUBJECT TO EXPOSURE.

RESPIRATORY PROTECTION

RESPIRATORY PROTECTION IS NOT REQUIRED UNDER CONDITIONS OF NORMAL USE. IF VAPOR OR MIST IS GENERATED WHEN THE MATERIAL IS HEATED OR HANDLED, USE AN ORGANIC VAPOR RESPIRATOR WITH A DUST AND MIST FILTER. ALL RESPIRATORS MUST BE NIOSH CERTIFIED.

VENTILATION

GENERAL ROOM VENTILATION IS NORMALLY SUFFICIENT. IF VAPOR OR MIST IS GENERATED WHEN THE MATERIAL IS HEATED OR HANDLED, ADEQUATE VENTILATION IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE MUST BE PROVIDED TO MAINTAIN CONCENTRATIONS BELOW THE SPECIFIED EXPOSURE OR FLAMMABLE LIMITS.

OTHER

CONSUMPTION OF FOOD AND BEVERAGE SHOULD BE AVOIDED IN WORK AREAS WHERE HYDROCARBONS ARE PRESENT. ALWAYS WASH HANDS AND FACE WITH SOAP AND WATER BEFORE EATING, DRINKING, OR SMOKING.

VI FIRE PROTECTION INFORMATION

FLASH POINT **< 20F**

TEST METHOD **P.M.C.C.**

IGNITION TEMPERATURE **NO DATA**

TEST METHOD **NO DATA**

FLAMMABLE LIMITS IN AIR % BY VOL.

LOWER **NO DATA**

UPPER **NO DATA**

EXTINGUISHING
MEDIA

USE DRY CHEMICAL, FOAM, OR CARBON DIOXIDE.

SPECIAL FIRE
FIGHTING
PROCEDURES

WATER MAY BE INEFFECTIVE BUT CAN BE USED TO COOL CONTAINERS EXPOSED TO HEAT OR FLAME.

UNUSUAL FIRE
AND EXPLOSIVE
CONDITIONS

DENSE SMOKE MAY BE GENERATED WHILE BURNING. CARBON MONOXIDE, CARBON DIOXIDE, AND OTHER
OXIDES MAY BE GENERATED AS PRODUCTS OF COMBUSTION. CAUTION!--CONTENTS ARE UNDER PRESSURE
AND CAN EXPLODE WHEN EXPOSED TO HEAT OR FLAMES.

VII REACTIVITY DATA

STABILITY
(THERMAL,
LIGHT, ETC.)

STABLE

CONDITIONS TO
AVOID

NONE

HAZARDOUS,
POLYMERIZATION

WILL NOT OCCUR

CONDITIONS TO
AVOID

NONE

COMPATIBILITY
SERIALS TO AVOID

MAY REACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION
PRODUCTS

NONE

VIII ENVIRONMENTAL PRECAUTIONS

STEPS TO BE
TAKEN IF
MATERIAL IS
RELEASED OR
SPILLED

CONSULT HEALTH EFFECT INFORMATION IN SECTION III, PERSONAL HEALTH PROTECTION INFORMATION IN SECTION V, FIRE PROTECTION INFORMATION IN SECTION VI, AND REACTIVITY DATA IN SECTION VII. NOTIFY APPROPRIATE AUTHORITIES OF SPILL. CONTAIN SPILL IMMEDIATELY. DO NOT ALLOW SPILL TO ENTER SEWERS OR WATERCOURSES. REMOVE ALL SOURCES OF IGNITION. PROVIDE ADEQUATE VENTILATION DURING CLEAN-UP. ABSORB WITH SOLVENT ABSORBENT MATERIAL. LARGE SPILLS MAY BE PICKED UP USING VACUUM PUMPS, SHOVELS, BUCKETS, OR OTHER MEANS AND PLACED IN DRUMS OR OTHER SUITABLE CONTAINERS.

WASTE DISPOSAL
METHOD

ALL DISPOSALS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THE MATERIAL, IF SPILLED OR DISCARDED, MAY BE A RCRA WASTE. THE MATERIAL, IF SPILLED OR DISCARDED, MAY BE A REGULATED WASTE. REFER TO STATE AND LOCAL REGULATIONS. CAUTION! IF REGULATED SOLVENTS ARE USED TO CLEAN UP SPILLED MATERIAL, THE RESULTING WASTE MIXTURE MAY BE REGULATED. DEPARTMENT OF TRANSPORTATION (DOT) REGULATIONS MAY APPLY FOR TRANSPORTING THIS MATERIAL WHEN SPILLED. WASTE MATERIAL MAY BE LANDFILLED OR INCINERATED AT AN APPROVED FACILITY.

IX MISCELLANEOUS

HANDLING AND
STORAGE
REQUIREMENTS

THIS PRODUCT IS CLASSIFIED AS ORM-D (CONSUMER COMMODITY) UNDER DOT REGULATIONS. SEE 49 CFR 171 THROUGH 178 FOR SHIPPING REQUIREMENTS. ALL IGNITION SOURCES IN THE AREA SHOULD BE CONTROLLED. FIRE EXTINGUISHERS SHOULD BE KEPT READILY AVAILABLE. SEE NFPA 30 AND OSHA 1910.106--FLAMMABLE AND COMBUSTIBLE LIQUIDS. DO NOT STORE AT TEMPERATURES GREATER THAN 120 F. CONTENTS UNDER PRESSURE AND CAN EXPLODE WHEN EXPOSED TO HEAT OR OPEN FLAME. CAUTION!--DO NOT PUNCTURE OR INCINERATE.

ADDITIONAL
INFORMATION

THIS MIXTURE MAY BE FORMULATED IN PART WITH COMPONENTS PURCHASED FROM OTHER COMPANIES. IN MANY INSTANCES, ESPECIALLY WHEN PROPRIETARY OR TRADE SECRET MATERIALS ARE USED, PENNZOIL COMPANY MUST RELY UPON THE HAZARD EVALUATION OF SUCH COMPONENT SUBMITTED TO PENNZOIL BY THAT PRODUCT'S MANUFACTURER OR IMPORTER.

X PHYSICAL PROPERTIES

BOILING POINT	< -20F (PROPELLANT)	PERCENT VOLATILE	10
MELTING POINT	N/A	VAPOR DENSITY (AIR=1)	3 - 5
APPEARANCE	Colorless to light yellow liquid	EVAPORATION RATE (EE=1)	>1
ODOR	Odorless to slightly oily	SPECIFIC GRAVITY	0.9
VAPOR PRESSURE	50PSIG @ 20C IN CAN.	MOLECULAR WEIGHT	VARIABLE
SOLUBILITY	SOLUBLE IN HYDROCARBONS. EMULSIFIES IN WATER.		

Formerly "Jon-Cote" 614



Castrol North America

Fax

775 Louis Drive
Warminster PA 18974

Telephone (215) 443 5220
Fax (215) 443 7094

To Dick Russel
Company TRW, Fasteners Division
From Becki Minich

Date 9/21/93 Time
Fax Number (617) 494-5536
Number of pages 8 (including cover)

Following is the data you requested on the 14th. Sorry for the delay.

Product Information for: Safety-Film 614
Safety-Film 615

Castrol bought this Product
line from Johnson Wax
under Johnson name of
"Jon-Cote 614"

TRW-01407

Castrol North America is a trade name
owned by Castrol Inc. and affiliated entities

ELA BURNHAM CASTROL COMPANY

0908-2780

SAFETY-FILM® 614

(FORMERLY CALLED JON-COTE #614)

PROTECTIVE COATING

SAFETY-FILM® 614 is a unique water-base wax emulsion which is used as a dual purpose dry film lubricant and corrosion preventive. **SAFETY-FILM® 614** also enhances the appearance of most surfaces.

SAFETY-FILM® 614 is recommended for use as a corrosion preventive and dry film lubricant for use on artillery shell casings, small arms ammunition clips, and other weather proofing military applications. **SAFETY-FILM® 614** meets military specification MIL-W-3888-C. **SAFETY-FILM® 614** is also an excellent corrosion preventive and dry film lubricant for steel strapping and is a good piano stringing lubricant.

SAFETY-FILM® 614 is used as a torque reduction and corrosion resistant lubricant on various fasteners. In addition, **SAFETY-FILM® 614** is used as a dry film lubricant in installation of various rivets.

This product is recommended for use as a corrosion preventive and decorative coating on cast iron, and over treated surfaces such as phosphated, Bonderized and anodized surfaces. Provides additional protection over all types of plating including cadmium and zinc.

The dry film lubricating and release characteristics of **SAFETY-FILM® 614** make it an ideal mold release for gold leaf and a good joint lubricant for umbrella-type television antennas.

In addition, **SAFETY-FILM® 614** can be used as a dressing on rubber, plastic and leather. **SAFETY-FILM® 614** can also be used to provide surface protection and enhance the appearance of interior wood paneling.

KEY PERFORMANCE BENEFITS

- Excellent corrosion control (meets Mil-W-3888-C)
- Superior dry film lubrication
- Enhances appearance of most surfaces
- Effective on a wide variety of substrates
- Provides medium gloss dry film (buffable)
- Non-flammable
- Easy to apply
- Easily diluted and mixed
- Excellent coverage
- Easy to remove

TRW-01408

Headquarters
1001 West 31st Street
Downers Grove IL 60515
(708) 241 4000

Eastern Sales Operation
775 Louis Drive
Warminster PA 18974
(215) 443 5220

Midwest Sales Operation
149 Grant Street
North Aurora IL 60542
(708) 892 8881

Western Sales Operation
5511 District Boulevard
Los Angeles CA 90040
(213) 771 7000

Automotive Industry Operation
28023 Center Oaks Court
Wixom MI 48393
(313) 241 0111

Canadian Sales Operation
2149 Winston Park Drive
Oakville Ontario L6H 5R1
(416) 820 2200

Castrol Mexico/ALGC
Norte 45 No. 812 02300
Industrial Vallejo Mexico, D.F.
(52) 557 5322



Industrial

APPLICATION

- To achieve effective adhesion, apply SAFETY-FILM® 614 to surfaces completely free of oils, greases, acids, soaps and other foreign materials. The presence of water, unless excessive, will not interfere with adhesion or film forming characteristics. Parts must be dried before stacking.

SAFETY-FILM® 614 is a low viscosity liquid, and is applied by any method or technique to the particular application – flow coat, roll coater, mechanical wipe, immersion or spray.

Whenever a spray technique is selected for application of SAFETY-FILM® 614, a well-atomized spray is recommended. Application should utilize repeated strokes over the spray pattern to ensure a thin, even coat.

Care must be taken to avoid spraying a dry or partially dry pattern, since a dry spray will dull the final gloss. The ideal spray gun is one which combines a comparatively high capacity air cap with a low capacity nozzle, with the result that a large volume of air mixed with a relatively small volume of material. Internal and external air mix spray techniques are satisfactory for SAFETY-FILM® 614 application as is airless spray. In all cases, the atomization air pressure should be kept high – from 65-75 pounds. Avoid inhalation of product in spray application.

RECOMMENDED DILUTIONS

Working dilutions of SAFETY-FILM® 614 should be determined by the end user. SAFETY-FILM® 614 can be diluted with tap water; however, if the local water is very hard, dilute with deionized water. For maximum protection and durability, use full strength.

DRYING

SAFETY-FILM® 614 dries tack-free under ambient conditions in approximately 20 minutes. Drying can be accelerated by application of heated air and increased air velocity. Drying time can also be accelerated by heating parts prior to application of coating.

REMOVABILITY

The dry film of SAFETY-FILM® 614 can be removed with chlorinated solvent vapor, degreaser solvents or alkaline cleaners such as COME CLEAN 900. Complete and efficient removal is a function of cleaner concentration, operating temperatures and contact/agitation time.

Use of SAFETY-FILM® 614 for unstated applications should be determined by the end user prior to actual production use.

TEST DATA

		<u>Test Panels</u>	
		Iron	Zinc
ASTM-D-2247-68	Cold		
HUMIDITY CABINET	Roll Steel	Phosphate	Phosphate
100% - 100°F	Hrs.	Hrs.	Hrs.

Dilutions (Water:Product)

0:1	48	80	80
1:4	40	72	72
1:2	32	48	48

		<u>Test Panels</u>	
		Iron	Zinc
ASTM-B-117-73	Cold		
SALT FOG - 5% SALT	Roll Steel	Phosphate	Phosphate
100% - 100°F	Hrs.	Hrs.	Hrs.

Dilutions (Water:Product)

0:1	2	4	15
1:4	1	2	5
1:2	--	2	5

Material Safety Data Sheets are available for all Castrol Industrial products and must be consulted for appropriate information regarding storage, safe handling, and disposability. All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing.

071363/1
SAFETY-FILM® 514

CASTROL INDUSTRIAL INC.

MATERIAL SAFETY DATA SHEET
Emergency Phone No.: (708) 241-4000
Information Phone No.: (708) 241-4000

FIRE
1
HEALTH 2 0 REACTIVITY
0
SPECIAL

I. MATERIAL IDENTIFICATION

PRODUCT TRADE NAME: SAFETY-FILM** 614
MANUFACTURER: CASTROL INDUSTRIAL INC.

ADDRESS: 1001 WEST 31ST STREET DOWNERS GROVE IL, 60515-1280

MFG. FACILITY ADDRESS:

Preparer: D. Bell

Preparation Date: 08/30/1993

II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENTS	%	CAS No.	TLV (ACGIH)	PEL (OSHA)
Fatty acids, tall-oil, compd. with morpholine	5-10	68002-77-7a		

Contains no other ingredients now known to be hazardous as defined by OSHA 29 CFR 1910.1000 (subpart z) and OSHA CFR 29 1910.1200.

III. PHYSICAL PROPERTIES

APPEARANCE & ODOR: Opaque tan emulsion; mild odor
BOILING POINT °F (°C): 212 99.99
MELTING POINT °F (°C): NA
SPECIFIC GRAVITY (H2O=1): 1.0
VAPOR PRESSURE: NA
VAPOR DENSITY (AIR=1): NA
EVAPORATION RATE (BUTYL ACETATE=1): <1
VOLATILES BY VOLUME: 70-85
VOC: 000.00 g/L 00.000 lbs/gallon VOC not yet determined for this product.
SOLUBILITY IN H2O: miscible
pH AS IS: 8.9-9.3
pH (DILUTE): NA 0 0 %

IV. FIRE AND EXPLOSION HAZARDS

FLASHPOINT (method used)
None °F None °C NA
FLAMMABLE LIMITS
LEL NA UEL NA
EXTINGUISHING MEDIA:
Water, dry chemical, CO2, or "alcohol" foam.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self contained breathing apparatus when fire fighting in a confined space. Cool fire exposed containers with waterspray to prevent rupture.

UNUSUAL FIRE & EXPLOSION HAZARDS:

None known.

CONTAINER HANDLING: DO NOT CUT OR WELD EMPTY DRUMS UNLESS THOROUGHLY CLEANED.

MSDS NUMBER: 5506.1

REVISED: 08/30/1993

** Registered in the U.S. Patent & Trademark Office

V. REACTIVITY DATA

STABILITY: Stable- normal conditions

CONDITIONS TO AVOID: None known.

INCOMPATIBILITIES: Strong oxidizing agents

HAZARDOUS DECOMPOSITION: Potential combustion products are oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: Will Not Polymerize

VI. HEALTH HAZARD SUMMARY

ROUTES OF EXPOSURE AND EFFECTS OF OVEREXPOSURE

EYES:

Concentrate will cause eye irritation.

SKIN ABSORPTION:

No acute effects expected.

SKIN CONTACT:

Concentrate may cause skin irritation.

INHALATION:

Mists of the concentrate and dilutions may cause respiratory irritation.

INGESTION:

Concentrate is not expected to be toxic. LD50 (rat) is greater than 5.0 g/kg.

CHRONIC EFFECTS:

Repeated overexposure may result in delayed kidney and liver damage.

THRESHOLD LIMIT VALUE: Not established. See section II

CONTAINS KNOWN CARCINOGENS: no NTP: no IARC: no OSHA: no

EMERGENCY AND FIRST AID PROCEDURES

EYES:

Immediately flush eyes with plenty of water. Get medical attention if irritation persists.

SKIN:

Wash skin with soap and water. If irritation occurs, get medical attention. Wash clothing before reuse.

INHALATION:

If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

INGESTION:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

MSDS NUMBER: 5506.1

REVISED: 08/30/1993

VII. CONTROL MEASURES

RESPIRATORY PROTECTION:

Good industrial hygiene practices recommend that engineering controls be used to reduce environmental concentrations to the threshold limit value (TLV) or permissible exposure limit (PEL). If any associated TLV or PEL is exceeded, provide NIOSH approved respiratory protection.

GLOVES:

Impervious gloves such as rubber should be used when handling this product.

EYE PROTECTION:

Safety glasses with side shield or chemical goggles.

OTHER:

Eyewash facility. Appropriate clothing to avoid skin contact.

VIII. PRECAUTIONS

CONTAINMENT PROCEDURES:

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Flush residual spill with water. For large spills, dike for later disposal.

WASTE DISPOSAL PROCEDURES:

Dispose of in accordance with local, state and federal regulations. Disposal of this material to the land may be banned by federal law (40 CFR 268).

STORAGE AND HANDLING PROCEDURES:

DO NOT ADD NITRITES TO THIS FLUID. Avoid contact with eyes. Avoid breathing mists. Do not take internally. Keep container closed when not in use. Bring product to room temperature before use.

RCRA HAZARDOUS WASTE DESIGNATION:

This product does not fall under current EPA RCRA definitions of hazardous waste.

CERCLA REPORTABLE QUANTITY:

This product does not contain any CERCLA regulated materials.

IX. OTHER HAZARD INFORMATION

PETROLEUM OIL: STEL = 10 mg/M³. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200.

X. ADDITIONAL REGULATORY INFORMATION

OCCUPATIONAL SAFETY and HEALTH ADMINISTRATION (OSHA)

29 CFR 1910.1200 Hazardous Chemical: yes

SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA)

Section 302, Extremely Hazardous Substance: no

Section 311, Hazardous Chemical: yes

Immediate: yes Delayed: yes Fire: no Sudden Release: no Reactive: no

Section 313, Toxic Chemical: no

TOXIC SUBSTANCES CONTROL ACT (TSCA)

This product is a mixture and is NOT listed in the TSCA Inventory. The individual ingredients in the product are listed in the TSCA Inventory.

DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME : not regulated

HAZARD CLASS (49 CFR 172.101): not applicable

HAZARD ID NUMBER: not applicable

FREIGHT CLASS

HMFC 50234, COMPOUNDS, IRON OR STEEL, RUST PREVENTING OR REMOVING, O/T PETROLEUM

DISCLAIMER

Information presented herein has been compiled from information provided to us by our suppliers and other sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or the use of any product in violation of any patent or in violation of any law or regulation. It is the users' responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.

MSDS NUMBER: 5506.1

REVISED: 08/30/1993

S.C. Johnson & Son, Inc.
1525 Howe Street
Racine, Wisconsin 53403

Emergency Medical Phone: (414) 631-2000
Informational Contact: Gordon B. Bradshaw
Phone: (414) 631-2777

***** Section I - Product Identification *****

PRODUCT NAME: JON-DRAW 722
PRODUCT NUMBER: 18160
SERIAL NUMBER: 013-014
ISSUE DATE: 11/06/86
SUPERCEDES DATE: 03/17/86

HMIS RATING
HEALTH: 1
FLAMMABILITY: 1
REACTIVITY: 0

***** Section II - Ingredient Information *****

WEIGHT %	INGREDIENT AND EXPOSURE LIMIT
70-80	Chlorinated Paraffin (CAS #63449- 39-8) (NTP Listed-See Section X).
20-30	Paraffin Oil
	Exposure Limit: 5mg\m3 (ACGIH TLV-TWA) (OSHA PEL) (Oil Mist)
4-6	Waxes
under 1	Surfactants

***** Section III - Physical Data *****

APPEARANCE/ODOR: Opaque, orange brown liquid with mild odor
VAPOR PRESSURE (AIR=1): ND
SOLUBILITY IN WATER: Negligible
FREEZING POINT (F): NA
PH: NA
SPECIFIC GRAVITY (H2O=1): 1.07
PERCENT VOLATILE BY VOLUME (%): NA
VAPOR DENSITY (AIR=1): ND
BOILING POINT (F): above 300
EVAPORATION RATE (BUTYL ACETATE=1): NA

***** Section IV - Fire and Explosion Information *****

FLASH POINT (F) (METHOD USED): above 250
FLAMMABLE LIMITS: ND
EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, Water Fog
SPECIAL FIREFIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus and protective clothing. Cool and use caution when approaching or handling fire-exposed containers.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Container may burst in heat of fire.

***** Section V - Health Hazard Data *****

PRIMARY ROUTE OF ENTRY: Skin Contact

S.C. Johnson & Son, Inc.
1525 Howe Street
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JON-DRAW 722
PRODUCT NUMBER: 18160
Serial Number: 013-014

***** Section V - Health Hazard Data (cont.) *****

SIGNS AND SYMPTOMS: Direct contact of product with eyes can cause irritation. Prolonged or repeated contact of product with skin may cause irritation. If taken internally, aspiration of liquid product can cause chemical pneumonitis.

FIRST AID PROCEDURES: Flush eyes with water for 15 minutes. If irritation persists, seek medical aid. If product is swallowed, do not induce vomiting. Seek medical aid at once. If product gets on skin, remove with soap and water.

***** Section VI - Reactivity Data *****

STABILITY: Stable

STABILITY-CONDITIONS TO AVOID: None known to SCJ

INCOMPATIBILITY: Strong alkalis/bases/caustics (e.g., sodium hydroxide).

HAZARDOUS DECOMPOSITION PRODUCTS: Possible liberation of chlorine at temperatures above 400 F.

HAZARDOUS POLYMERIZATION: Will Not Occur

HAZARDOUS POLYMERIZATION-CONDITIONS TO AVOID: None known to SCJ

***** Section VII - Spill or Leak Procedures *****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize.

WASTE DISPOSAL INFORMATION: No special method. Observe all applicable Federal/State regulations and Local ordinances regarding disposal of non-hazardous materials.

***** Section VIII - Special Protection Information *****

RESPIRATORY PROTECTION: If ventilation is adequate, respiratory protection not required.

VENTILATION: General room ventilation is normally adequate. Substantial amounts of mists/vapors can be controlled with local exhaust ventilation or respiratory protection.

PROTECTIVE GLOVES: If prolonged or repeated contact with undiluted product is possible: Any impervious material.

EYE PROTECTION: Eye protection not required unless contact with undiluted product is possible.

OTHER PROTECTIVE MEASURES: Use good personal hygiene practices. Where gross eye/skin contact may be a problem, wear/use appropriate protective equipment.

TRW-01416

0908-2789

S.C. Johnson & Son, Inc.
1525 Howe Street
Racine, Wisconsin 53403

JON-DRAW 722
PRODUCT NUMBER: 18160
Serial Number: 013-014

***** Section IX - Special Precautions *****

PRECAUTIONARY LABELING: CAUTION: Product may be harmful if swallowed. May be irritating to eyes. If eye contact occurs, immediately flush with water for 15 minutes. If irritation continues, see a doctor.
Avoid prolonged contact of undiluted product with skin. Good industrial hygiene practices should be followed when working with this product.
OTHER HANDLING AND STORAGE CONDITIONS: Wash thoroughly after handling. Keep out of reach of children.

***** Section X - Additional Information *****

C-24 Chlorinated paraffins containing 43% chlorine were not mutagenic when tested in the Ames Assay. In a recent National Toxicology Program bioassay, when force fed to rats and mice at high levels for long periods of time, this chlorinated paraffin produced a carcinogenic response in male mice only. These conditions represent extreme exposure conditions which are quite unlikely to be encountered by humans during handling or manufacturing use of chlorinated paraffins.

For information on appropriate emergency procedures phone: (414) 631-2000

NA - Not Applicable NSR - No Special Requirement
ND - Not Determined for this product

The information herein is given in good faith. No warranty, expressed or implied, is made. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State and local laws and regulations.



Subsidiary of
THE ANDREW JERGENS COMPANY

June 9, 1986

TO WHOM IT MAY CONCERN:

On November 25, 1983, the Occupational Safety and Health Administration (OSHA) published a final occupational safety and health standard entitled "Hazard Communication" (29 CFR 1910.1200). All employers subject to the standard were required to be in compliance by May 25, 1986. The purpose of this standard is to ensure that hazards of all chemicals produced and distributed are evaluated and proper information regarding those hazards is transmitted to affected employers and employees within the manufacturing section.

This standard and state laws which establish a similar standard are commonly referred to as "Right-to-Know" laws.

In paragraph (5)(v) of Hazard Communication (29 CFR 1910.1200), it states, "This section does not apply to:.....foods, drugs, or cosmetics intended for personal consumption by employees while in the workplace."


All SBS skin care products are defined as drugs or cosmetics by Federal law. SBS Products, Inc. is registered with the Food and Drug Administration (FDA) as a Drug Establishment and a Cosmetic Product Establishment. Since SBS skin care products are drugs or cosmetics, they are subject to the labeling requirements of the Federal Food, Drug and Cosmetic Act and labeling regulations issued by FDA.

Because the OSHA Hazard Communication standard does not apply to drugs and cosmetics intended for personal consumption by employees while in the workplace, you do not require Material Safety Data Sheets on SBS skin care products to comply with this Federal regulation.

Material Safety Data Sheets on SBS skin care products are available, however, if deemed necessary. As in the past, we will send the sheets upon written request.

A copy of the portion of 29 CFR which is quoted in this letter is attached.

Sincerely,



Robert L. Blasko
Executive Vice President